This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of generating images suitable for use with a multi-view stereoscopic display ~~including~~ comprising the steps of:

intercepting data passed from an application to an application programming interface, said data representing a scene or object to be displayed on said display, and wherein said data is intercepted by ~~looking up~~using an internal symbol table to determine a memory location for an application program~~programme~~ interface function, storing a modified library into memory, and redirecting application commands to said memory location to said modified library;

processing said data to render multiple views of said scene or object;

creating modified data by modifying said intercepted data to represent said multiple views; and

passing said modified data to said application programming interface.

Claim 2 (currently amended): ~~A~~ The method as claimed in claim 1 wherein processing of said data includes the steps of:

identifying replayable sequences of commands and processing said commands with valid sequences ~~to minimize command flushing stages required~~.

Claim 3 (currently amended): ~~A~~ The method as claimed in claim 1 wherein said multiple views are composed into a composite image.

Claim 4 (currently amended): ~~A~~ The method as claimed in claim 3 wherein said composite image is formed by mapping said multiple views to pixels on said display by:

$$N = \frac{(k + k_{offset} - 3l\tan\alpha)\bmod X}{X}N_{tot}$$

where k is a horizontal pixel index

k_{offset} is horizontal shift of lenticular lens array

α is angle of the lenticular lens array

X is views per lens

N_{tot} is total number of views

and N is view number of each sub pixel k,l.

Claim 5 (currently amended): ~~A~~ The method as claimed in claim 4 wherein N is rounded to a nearest integer value.

Claim 6 (currently amended): ~~A~~ The method as claimed in claim 4 wherein image data for each pixel is determined by a weighted average of views having closest integer values to N.

Claim 7 (currently amended): ~~A~~ The method as claimed in claim 4 further including the step of generating a modulation mask based on characteristics of said display, wherein

$$V_c = \frac{N_{tot}/3}{P_\mu}$$

$$V_r = \frac{N_{tot}\tan(\alpha)}{P_\mu}$$

where horizontal component of lenticular pitch is P_μ and is derived from:

$$P_\mu = P\sqrt{1 + \tan(\alpha\ )^2}$$

where P is the lenticular pitch and α is angle of the lenticular lens and N_{tot} is total number of distinct views;

and wherein for each ~~colour~~ color component of a row of a raster scan a previous view is incremented by V_c, and for each row the view is incremented by V_r.

Claim 8 (currently amended): A system for creating images suitable for use with a multi-view autostereoscopic display ~~including~~ comprising:

~~a~~ capture means for intercepting 3D geometric primitives and associated characteristics passed between an application and an application programming interface;

a-view generation means for imaging said 3D geometric primitives and said associated characteristics from multiple distinct viewing positions;

a-mask calculation means for determining a relative contribution of each view based on characteristics of an associated lenticular lens array; and

an-accumulation means for combining said views with said masks to generate a composite 3D image.

Claim 9 (currently amended): A-The system as claimed in claim 8 wherein said capture means intercepts said primitives an-and characteristics by:

looking up using an internal symbol table to determine a memory location for an application programmeprogram interface function;

storing a modified library into memory; and

redirecting application commands to said memory location to said modified library.

Claim 10 (currently amended): A-The system as claimed in claim 8 wherein said accumulation means includes:

a view calculator to determine which said view is assigned to each pixel of said 3D image.

Claim 11 (currently amended): A-The system as claimed in claim 10 wherein said view calculator determines said view by:

$$N = \frac{(k + k_{offset} - 3l\tan\alpha)\bmod X}{X} N_{tot}$$

where k is a horizontal pixel index

k_{offset} is horizontal shift of lenticular lens array

α is angle of the lenticular lens array

X is views per lens

N_{tot} is total number of views

and N is view number of each sub pixel k,l.

Claim 12 (currently amended): A—The system as claimed in claim 8 wherein said mask calculation means determines a fractional proportion of each said view for each pixel of said 3D image.

Claim 13 (currently amended): A—The system as claimed in claim 8 wherein characteristics of said lens array are determined by:

$$V_c = \frac{N_{tot}/3}{P_\mu}$$

$$V_r = \frac{N_{tot} \tan(\alpha)}{P_\mu}$$

where horizontal component of lenticular pitch is P_μ and is derived from:

$$P_\mu = P\sqrt{1 + \tan(\alpha)^2}$$

where P is the lenticular pitch and α is angle of the lenticular lens and N_{tot} is total number of distinct views;

and where V_c represents the number of views per eolourcolor component and V_r represents the number of views per image row.

Claim 14 (currently amended): A—The system as claimed in claim 13 wherein said 3D image is traversed in a raster scan to form said composite image.

Claim 15 (currently amended): A—The system as claimed in claim 14 wherein a first position of said raster scan is initialized to an arbitrary view number.

Claim 16 (currently amended): A—The system as claimed in claim 15 wherein for each subsequent eolourcolor component in a same row of said raster scan a previous view is incremented by V_c.

Claim 17 (currently amended): A-The system as claimed in claim 16 wherein as said raster scan advances to a new row the view is incremented by V_r.